We claim:

1. A compound of formula (I),

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enantiomers, diastereomers, salts, and solvates thereof wherein

R<sup>1</sup> is

(a) hydrogen, or

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(b) alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more  $Z^1$ ,  $Z^2$  and  $Z^3$ ;

R<sup>2</sup> is

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- (a) hydrogen, halo, cyano,
- (b) alkyl, alkenyl, alkynyl, haloalkyl, alkoxy, cycloalkoxy, heterocyclooxy, aryloxy, heteroaryloxy, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1a</sup>, Z<sup>2a</sup> and Z<sup>3a</sup>; or

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(c) 
$$-OR^{10a}$$
,  $-SR^{10a}$ , or  $-SO_2R^{10a}$ 

R<sup>3</sup> and R<sup>4</sup> are independently

- (a) hydrogen,
- (b) alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which

may be optionally independently substituted as valence allows with one or more  $Z^{1b}$ ,  $Z^{2b}$  and  $Z^{3b}$ ;

- $\begin{array}{c} \text{(c)} OR^{11}, NR^{12}R^{13}, N(R^{12})C(O)R^{11}, N(R^{12})C(O)OR^{11}, N(R^{12})SO_2R^{14}, \text{ or} \\ C(O)NR^{12}R^{13}, SO_2NR^{12}R^{13}, N(R^{12})C(O)NR^{12a}R^{13}, \text{ or} N(R^{12})SO_2NR^{12a}R^{13}; \text{ or} \\ \end{array}$
- (d) R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are attached combine to form a heterocyclo ring optionally independently substituted as valence allows with one or more Z<sup>1b</sup>, Z<sup>2b</sup> and Z<sup>3b</sup>:

R<sup>5</sup> is

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- (a) hydrogen, halo, hydroxy, cyano,
- (b) alkyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1c</sup>, Z<sup>2c</sup> and Z<sup>3c</sup>; or
  - (c)  $-OR^7$ ,  $-C(O)R^7$ ,  $-C(O)OR^7$ , or  $-NR^8R^9$ ;
- $15 R^6$  is

- (a) hydrogen, hydroxy, halo, or cyano,
- (b) alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclo, aryl, heteroaryl, (cycloalkyl)alkyl, (heterocyclo)alkyl, (aryl)alkyl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1d</sup>, Z<sup>2d</sup> and Z<sup>3d</sup>; or
- (c)  $-OR^{7a}$ ,  $-NR^{8a}R^{9a}$ ,  $-N(R^{8a})SO_2R^{10}$ ,  $-N(R^{8a})SO_2NR^{8b}R^{9b}$ ,  $-N(R^{8a})C(O)R^{7a}$ ,  $-N(R^{8a})C(O)NR^{8b}R^{9b}$ ,  $-N(R^{8a})C(O)OR^{7a}$ ,  $-C(O)R^{7a}$ ,  $-C(O)OR^{7a}$ ,  $-C(O)NR^{8a}R^{9a}$ , or  $-OC(O)NR^{8a}R^{9a}$ ;
- R<sup>7</sup>, R<sup>7a</sup> and R<sup>7b</sup> are independently
- 25 (a) hydrogen, or
  - (b) alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1c</sup>, Z<sup>2c</sup> and Z<sup>3c</sup>;
- $R^8$ ,  $R^{8a}$ ,  $R^{8b}$ ,  $R^9$   $R^{9a}$  and  $R^{9b}$  are independently

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- (a) hydrogen,
- (b) alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1d</sup>, Z<sup>2d</sup> and Z<sup>3d</sup>; or
- (c)  $-OR^{7b}$ ,  $-NR^{8c}R^{9c}$ ,  $-N(R^{8c})SO_2R^{10b}$ ,  $-N(R^{8c})C(O)R^{7b}$ ,  $-N(R^{8c})C(O)OR^{7b}$ ,  $-SO_2NR^{8c}R^{9c}$ ,  $-SO_2R^{10b}$ ,  $-C(O)R^{7b}$ ,  $-C(O)OR^{7b}$ , or  $-C(O)NR^{8c}R^{9c}$ ;

R<sup>8c</sup> and R<sup>9c</sup> are independently

- (a) hydrogen,
- (b) alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1d</sup>, Z<sup>2d</sup> and Z<sup>3d</sup>;
  - R<sup>10</sup>, R<sup>10a</sup> and R<sup>10b</sup> are independently alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1d</sup>, Z<sup>2d</sup> and Z<sup>3d</sup>;
  - R<sup>11</sup>, R<sup>12</sup>, R<sup>12a</sup> and R<sup>13</sup> are independently
    - (a) hydrogen, or
- (b) alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1e</sup>, Z<sup>2e</sup> and Z<sup>3e</sup>;
  - $R^{14}$  is alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more  $Z^{1e}$ ,  $Z^{2e}$  and  $Z^{3e}$ ;
  - $Z^{1\text{-le}}, Z^{2\text{-2e}}$ , and  $Z^{3\text{-3e}}$  are optional substituents independently selected from
    - (1) Y, where Y is

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- (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl;
- (ii) a group (i) which is itself substituted by one or more of the same or different groups (i); or
- (iii) a group (i) or (ii) which is independently substituted by one or more (preferably 1 to 3) of the following groups (2) to (13) of the definition of Z<sup>1</sup>,
- 10 (2)  $-OH \text{ or } -OY^1$ ,
  - (3)  $-SH \text{ or } -SY^1$ ,
  - (4)  $-C(O)_tH$ ,  $-C(O)_tY^1$ , or  $-O-C(O)Y^1$ , where t is 1 or 2,
  - (5)  $-SO_3H$ , or  $-S(O)_tY^1$ ,
  - (6) halo,
- 15 (7) cyano,
  - (8) nitro,
  - (9)  $-U^1-NY^2Y^3$ ,
  - (10)  $-U^1-N(Y^1)-U^2-NY^2Y^3$ ,
  - (11)  $-U^1-N(Y^4)-U^2-Y^1$ ,
  - (12)  $-U^1-N(Y^4)-U^2-H$ ,
    - (13) oxo;

 $U^1$  and  $U^2$  are each independently

- (1) a single bond,
- (2)  $-U^3-S(O)_t-U^4-$ ,
- 25 (3)  $-U^3-C(O)-U^4$ -,
  - (4)  $-U^3-C(S)-U^4-$ ,
  - (5)  $-U^3-O-U^4-$ ,
  - (6)  $-U^3-S-U^4-$ ,
  - (7)  $-U^3$ -O-C(O)- $U^4$ -,
- 30 (8)  $-U^3$ -C(O)-O- $U^4$ -, or

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(9)  $-U^3-C(=NV^{1a})-U^4-;$ 

 $V^{1a}$  is independently hydrogen, alkyl, -CN, -C(O)Y<sup>1</sup>, -S(O)<sub>2</sub>Y<sup>5</sup>, S(O)<sub>2</sub>NY<sup>2</sup>Y<sup>3</sup>; Y<sup>1</sup>, Y<sup>2</sup>, Y<sup>3</sup> and Y<sup>4</sup>

- (1) are each independently hydrogen or a group provided in
  - (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl;
  - (ii) a group (i) which is itself substituted by one or more of the same or different groups (i),
  - (iii) a group (i) or (ii) which is independently substituted by one or more (preferably 1 to 3) of the following groups (1) to (12) of the definition of  $\mathbb{Z}^4$ , or
- (2) Y<sup>2</sup> and Y<sup>3</sup> may together be alkylene or alkenylene, completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is unsubstituted or substituted with one or more groups selected from alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl, or
- (3) Y<sup>2</sup> or Y<sup>3</sup>, together with Y<sup>1</sup>, may be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is unsubstituted or substituted with one or more groups selected from alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl, or
- (4) Y<sup>2</sup> and Y<sup>3</sup> together with the nitrogen atom to which they are attached may combine to form a group -N=CY<sup>5</sup>Y<sup>6</sup> where Y<sup>5</sup> and Y<sup>6</sup> are each independently H or a group provided selected from alkyl, (hydroxy)alkyl, (alkoxy)alkyl,

alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl; and

 $Z^4$  is

- 5 (1) -OH or -OYa,
  - (2)  $-SH \text{ or } -SY^a$ ,
  - (3)  $-C(O)_tH$ ,  $-C(O)_tY^a$ , or  $-O-C(O)Y^a$ , where t is 1 or 2,
  - (4)  $-SO_3H$ , or  $-S(O)_tY^a$ ,
  - (5) halo,
- 10 (6) cyano,
  - (7) nitro,
  - $(8) \qquad -U^{1}-NY^{b}Y^{c},$
  - (9)  $-U^1-N(Y^1)-U^2-NY^bY^c$ ,
  - (10)  $-U^1-N(Y^d)-U^2-Y^a$ ,
  - (11)  $-U^1-N(Y^d)-U^2-H$ ,
  - (12) oxo;

Ya, Yb, Yc and Yd

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- (1) are each independently hydrogen or a group provided in
  - (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl;

U<sup>3</sup> and U<sup>4</sup> are each independently

- (1) a single bond,
- 25 (2) alkylene,
  - (3) alkenylene, or
  - (4) alkynylene.
  - 2. A compound of claim 1 wherein
- $R^3$  and  $R^4$  are independently

- (a) hydrogen,
- (b) alkyl, haloalkyl, (hydroxy)alkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocyclo)alkyl, (aryl)alkyl or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1b</sup>, Z<sup>2b</sup> and Z<sup>3b</sup>; or
- (c)  $R^3$  and  $R^4$  together with the nitrogen atom to which they are attached combine to form a heterocyclo ring optionally independently substituted as valence allows with one or more  $Z^{1b}$ ,  $Z^{2b}$  and  $Z^{3b}$ .
- 10 3. A compound of claim 2 wherein  $R^6$  is
  - (a) alkyl, alkenyl, alkynyl, heteroaryl or aryl any of which may be optionally independently substituted as valence allows with one or more  $Z^{1d}$ ,  $Z^{2d}$  and  $Z^{3d}$ ; or
- 15 (b)  $-OR^{7a}$ .
  - 4. A compound of claim 3 wherein  $R^{7a}$  is alkyl optionally substituted with  $Z^{1c}$ .
  - 5. A compound of claim 4 wherein
- Z<sup>1b</sup>, Z<sup>2b</sup> and Z<sup>3b</sup> are optional substituents independently selected from –OH, -OY<sup>1</sup>,  $-U^1-NY^2Y^3, -C(O)_tH, -C(O)_tY^1, -N(Y^1)-U^2-NY^2Y^3, -N(Y^4)-U^2-Y^1, \text{ or } -N(Y^4)-U^2-H;$  Z<sup>1c</sup> is
  - (a) -OH,  $-OY^1$  or
  - (b) aryl optionally substituted with -OH or  $-OY^1$ ;
- $Z^{1d}$ ,  $Z^{2d}$  and  $Z^{3d}$  are optional substituents independently selected from
  - (a) cyano, halo, -OH, -OY<sup>1</sup>, -U<sup>1</sup>-NY<sup>2</sup>Y<sup>3</sup>, -C(O)<sub>t</sub>H, -C(O)<sub>t</sub>Y<sup>1</sup>, -S(O)<sub>t</sub>Y<sup>1</sup>, -N(Y<sup>1</sup>)-U<sup>2</sup>-NY<sup>2</sup>Y<sup>3</sup>, -N(Y<sup>4</sup>)-U<sup>2</sup>-Y, or -N(Y<sup>4</sup>)-U<sup>2</sup>-H;
- (b) alkyl or alkoxy optionally substituted with one or more cyano, halo, -OH, -OY $^1$ ,  $-U^1-NY^2Y^3, -C(O)_tH, -C(O)_tY^1, -S(O)_tY^1, -N(Y^1)-U^2-NY^2Y^3, -N(Y^4)-U^2-Y^1, or$   $-N(Y^4)-U^2-H.$

6. A compound of of claim 5 wherein

R<sup>3</sup> is hydrogen;

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R<sup>4</sup> is alkyl, haloalkyl, (hydroxy)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo, (heterocyclo)alkyl, (aryl)alkyl or (heteroaryl)alkyl any of which may be optionally independently substituted as valence allows with one or more Z<sup>1b</sup>, Z<sup>2b</sup> and Z<sup>3b</sup>;
 R<sup>6</sup> is

- (a) alkynyl optionally substituted with  $Z^{1d}$  where  $Z^{1d}$  is aryl which may be further optionally independently substituted with one or more cyano, halo, -OH, -OY<sup>1</sup>, -U<sup>1</sup>-NY<sup>2</sup>Y<sup>3</sup>, -C(O)<sub>t</sub>H, -C(O)<sub>t</sub>Y<sup>1</sup>, -S(O)<sub>t</sub>Y<sup>1</sup>, -N(Y<sup>1</sup>)-U<sup>2</sup>-NY<sup>2</sup>Y<sup>3</sup>, -N(Y<sup>4</sup>)-U<sup>2</sup>-Y<sup>1</sup>, or -N(Y<sup>4</sup>)-U<sup>2</sup>-H;
- (b) aryl optionally independently substituted as valence allows with one or more  $Z^{1d}$ ,  $Z^{2d}$  and  $Z^{3d}$ :
- (c)  $-OR^{7a}$ ; or
- (d) heterocyclo optionally independently substituted as valence allows with one or more  $Z^{1d}$ ,  $Z^{2d}$  and  $Z^{3d}$ ;
  - $Z^{1b}, Z^{2b} \text{ and } Z^{3b} \text{ are optional substituents independently selected from -OH, -OY$^1,} \\ -U^1-NY^2Y^3, -C(O)_tH, -C(O)_tY^1, -N(Y^4)-U^2-Y, \text{ or -N}(Y^4)-U^2-H \\ \text{where}$

U<sup>1</sup> is a bond,  $U^2$  is  $-U^3$ -C(O)- $U^4$ - or  $-U^3$ -C(O)O- $U^4$ - and  $U^3$  and  $U^4$  are independently a bond or alkylene :

Z<sup>1c</sup> is

- (a)  $-OY^1$  where  $Y^1$  is aryl, or
- 25 (b) aryl optionally substituted with –OH or –OY¹ where Y¹ is alkyl;

 $Z^{1d}$ ,  $Z^{2d}$  and  $Z^{3d}$  are optional substituents independently selected from

- (a) cyano, halo, -OH, -OY<sup>1</sup>, -C(O)<sub>t</sub>H, -C(O)<sub>t</sub>Y<sup>1</sup>, -S(O)<sub>t</sub>Y<sup>1</sup>, or
- (b) alkyl or alkoxy optionally substituted with one or more cyano, halo, -OH, -OY<sup>1</sup>,  $-U^{1}-NY^{2}Y^{3}, -C(O)_{t}H, -C(O)_{t}Y^{1}, -S(O)_{t}Y^{1}, -N(Y^{4})-U^{2}-Y^{1}, \text{ or } -N(Y^{4})-U^{2}-H$

30 where

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 $U^1$  is a bond, or -C(O)-,  $U^2 \text{ is } -U^3\text{-C(O)}-U^4\text{-, }-U^3\text{-C(O)}O\text{-}U^4\text{-, or }-U^3\text{-SO}_2\text{-}U^4\text{-, and}$   $U^3 \text{ and } U^4 \text{ are indepedently a bond or alkylene.}$ 

5 7. A compound of claim 6 wherein

R<sup>1</sup> is alkyl;

R<sup>2</sup> is hydrogen; and

R<sup>5</sup> is hydrogen or alkyl.

10 8. A compound of claim one having the formula IIa

$$Z^{2d}$$
 $Z^{2d}$ 
 $Z^{1d}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{4}$ 

wherein

 $Z^{1d}$  is

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- 15 (a) cyano, halo, -OH, -OY<sup>1</sup>, -C(O)<sub>t</sub>H, -C(O)<sub>t</sub>Y<sup>1</sup>, -S(O)<sub>t</sub>Y<sup>1</sup>, or
  - (b) alkyl or alkoxy optionally substituted with one or more cyano, halo, -OH, -OY<sup>1</sup>,  $-U^1-NY^2Y^3, -C(O)_tH, -C(O)_tY^1, -S(O)_tY^1, -N(Y^4)-U^2-Y^1, \text{ or } -N(Y^4)-U^2-H$  where

 $U^1$  is a bond, or -C(O)-,

 $U^2$  is  $-U^3$ -C(O)- $U^4$ -,  $-U^3$ -C(O)O- $U^4$ -, or  $-U^3$ -SO<sub>2</sub>- $U^4$ -, and

U<sup>3</sup> and U<sup>4</sup> are indepedently a bond or alkylene; and

 $Z^{2d}$  and  $Z^{3d}$  are optional substituents independently selected from

- (a) cyano, halo, -OH, -OY<sup>1</sup>, -C(O)<sub>t</sub>H, -C(O)<sub>t</sub>Y<sup>1</sup>, -S(O)<sub>t</sub>Y<sup>1</sup>, or
- (b) alkyl or alkoxy optionally substituted with one or more cyano, halo, -OH, -OY<sup>1</sup>,  $-U^{1}-NY^{2}Y^{3}, -C(O)_{t}H, -C(O)_{t}Y^{1}, -S(O)_{t}Y^{1}, -N(Y^{4})-U^{2}-Y^{1}, \text{ or } -N(Y^{4})-U^{2}-H$  where

 $U^1$  is a bond, or -C(O)-,  $U^2 \text{ is } -U^3\text{-C(O)}-U^4\text{-, }-U^3\text{-C(O)}O\text{-}U^4\text{-, or }-U^3\text{-SO}_2\text{-}U^4\text{-, and}$   $U^3 \text{ and } U^4 \text{ are indepedently a bond or alkylene.}$ 

5 9. A compound of claim 8 wherein

R<sup>3</sup> and R<sup>4</sup> are independently

- (a) hydrogen,
- (b) alkyl, haloalkyl, (hydroxy)alkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocyclo)alkyl, (aryl)alkyl or (heteroaryl)alkyl and of which may be optionally independently substituted as valence allows with one or more  $Z^{1b}$ ,  $Z^{2b}$  and  $Z^{3b}$ ; or
- (c)  $R^3$  and  $R^4$  together with the nitrogen atom to which they are attached combine to form a heterocyclo ring optionally independently substituted as valence allows with one or more  $Z^{1b}$ ,  $Z^{2b}$  and  $Z^{3b}$ .

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- 10. A compound of claim 9 wherein
- $$\begin{split} Z^{1b}, Z^{2b} \text{ and } Z^{3b} \text{ are optional substituents independently selected from -OH, -OY$^1,} \\ -U^1-NY^2Y^3, -C(O)_tH, -C(O)_tY^1, -N(Y^1)-U^2-NY^2Y^3, -N(Y^4)-U^2-Y^1, \text{ or -N}(Y^4)-U^2-H. \end{split}$$
- 20 11. A compound of claim 10 wherein

R<sup>1</sup> is alkyl;

R<sup>2</sup> is hydrogen; and

R<sup>5</sup> is hydrogen or alkyl.

25 12. A compound of claim 1 having formula IIb

$$Z^{1d}$$

$$Z^{2d}$$

$$R^{1}$$

$$R^{2}$$

$$N$$

$$N$$

$$N$$

$$N$$

$$R^{3}$$

$$R^{4}$$

IIb

wherein

Z<sup>1d</sup> is

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- (a) cyano, halo, -OH,  $-OY^1$ ,  $-C(O)_tH$ ,  $-C(O)_tY^1$ ,  $-S(O)_tY^1$ , or
- (b) alkyl or alkoxy optionally substituted with one or more cyano, halo, -OH, -OY<sup>1</sup>,  $-U^1-NY^2Y^3$ , -C(O)<sub>t</sub>H, -C(O)<sub>t</sub> Y<sup>1</sup>, -S(O)<sub>t</sub>Y<sup>1</sup>, -N(Y<sup>4</sup>)-U<sup>2</sup>-Y<sup>1</sup>, or -N(Y<sup>4</sup>)-U<sup>2</sup>-H where

 $U^1$  is a bond, or -C(O)-,

 $U^2$  is  $-U^3-C(O)-U^4-$ ,  $-U^3-C(O)O-U^4-$ , or  $-U^3-SO_2-U^4-$ , and

U<sup>3</sup> and U<sup>4</sup> are independently a bond or alkylene; and

 $Z^{2d}$  and  $Z^{3d}$  are optional substituents independently selected from

- (a) cyano, halo, -OH, -OY<sup>1</sup>, -C(O)<sub>t</sub>H, -C(O)<sub>t</sub>Y<sup>1</sup>, -S(O)<sub>t</sub>Y<sup>1</sup>, or
- (b) alkyl or alkoxy optionally substituted with one or more cyano, halo, -OH, -OY<sup>1</sup>,  $-U^{1}-NY^{2}Y^{3}, -C(O)_{t}H, -C(O)_{t}Y^{1}, -S(O)_{t}Y^{1}, -N(Y^{4})-U^{2}-Y^{1}, \text{ or } -N(Y^{4})-U^{2}-H$

where

 $U^1$  is a bond, or -C(O)-,  $U^2$  is  $-U^3$ -C(O)- $U^4$ -,  $-U^3$ -C(O)O- $U^4$ -, or  $-U^3$ -SO<sub>2</sub>- $U^4$ -, and  $U^3$  and  $U^4$  are independently a bond or alkylene.

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- 13. A compound of claim 12 wherein
- R<sup>3</sup> and R<sup>4</sup> are independently
  - (a) hydrogen,
- (b) alkyl, haloalkyl, (hydroxy)alkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocyclo)alkyl, (aryl)alkyl or (heteroaryl)alkyl and of which may be optionally independently substituted as valence allows with one or more Z<sup>1b</sup>, Z<sup>2b</sup> and Z<sup>3b</sup>; or
  - (c)  $R^3$  and  $R^4$  together with the nitrogen atom to which they are attached combine to form a heterocyclo ring optionally independently substituted as valence allows with one or more  $Z^{1b}$ ,  $Z^{2b}$  and  $Z^{3b}$ .

- 14. A compound of claim 13 wherein
- $Z^{1b}$ ,  $Z^{2b}$  and  $Z^{3b}$  are optional substituents independently selected from -OH, -OY<sup>1</sup>, -U<sup>1</sup>-NY<sup>2</sup>Y<sup>3</sup>, -C(O)<sub>t</sub>H, -C(O)<sub>t</sub>Y<sup>1</sup>, -N(Y<sup>1</sup>)-U<sup>2</sup>-NY<sup>2</sup>Y<sup>3</sup>, -N(Y<sup>4</sup>)-U<sup>2</sup>-Y<sup>1</sup>, or -N(Y<sup>4</sup>)-U<sup>2</sup>-H.

15. A compound of claim 14 wherein

R<sup>1</sup> is alkyl;

R<sup>2</sup> is hydrogen; and

R<sup>5</sup> is hydrogen or alkyl.

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- 16. A pharmaceutical composition comprising (a) at least one compound according to claim 1, or a pharmaceutically acceptable salt, hydrate or prodrug thereof, and (b) a pharmaceutically-acceptable carrier or diluent.
- 15 17. A method of treating an inflammatory or immune disease or disorder comprising administering to a mammal in need thereof a therapeutically-effective amount of at least one compound according to claim 1.
- 18. The method of claim 17 in which the inflammatory or immune disease is selected from rheumatoid arthritis, asthma, inflammatory bowel disease, chronic obstructive pulmonary disease, and psoriasis.
  - 19. A method of treating cancer comprising administering to a mammal in need thereof a therapeutically-effective amount of at least one compound according to claim 15.